# Management Plan for the Summer Commercial Troll Fishery in Southeast Alaska, 2005

by

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and

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Alaska Department of Fish and Game

**Divisions of Sport Fish and Commercial Fisheries** 



#### **Symbols and Abbreviations**

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Weights and measures (metric)		General		Measures (fisheries)	
centimeter	cm	Alaska Administrative		fork length	FL
deciliter	dL	Code	AAC	mideye-to-fork	MEF
gram	g	all commonly accepted		mideye-to-tail-fork	METF
hectare	ha	abbreviations	e.g., Mr., Mrs.,	standard length	SL
kilogram	kg		AM, PM, etc.	total length	TL
kilometer	km	all commonly accepted			
liter	L	professional titles	e.g., Dr., Ph.D.,	Mathematics, statistics	
meter	m		R.N., etc.	all standard mathematical	
milliliter	mL	at	@	signs, symbols and	
millimeter	mm	compass directions:		abbreviations	
		east	E	alternate hypothesis	$H_A$
Weights and measures (English)		north	N	base of natural logarithm	e
cubic feet per second	ft <sup>3</sup> /s	south	S	catch per unit effort	CPUE
foot	ft	west	W	coefficient of variation	CV
gallon	gal	copyright	©	common test statistics	$(F, t, \chi^2, etc.)$
inch	in	corporate suffixes:		confidence interval	CI
mile	mi	Company	Co.	correlation coefficient	
nautical mile	nmi	Corporation	Corp.	(multiple)	R
ounce	oz	Incorporated	Inc.	correlation coefficient	
pound	lb	Limited	Ltd.	(simple)	r
quart	qt	District of Columbia	D.C.	covariance	cov
yard	yd	et alii (and others)	et al.	degree (angular )	0
		et cetera (and so forth)	etc.	degrees of freedom	df
Time and temperature		exempli gratia		expected value	E
day	d	(for example)	e.g.	greater than	>
degrees Celsius	°C	Federal Information		greater than or equal to	≥
degrees Fahrenheit	°F	Code	FIC	harvest per unit effort	HPUE
degrees kelvin	K	id est (that is)	i.e.	less than	<
hour	h	latitude or longitude	lat. or long.	less than or equal to	≤
minute	min	monetary symbols	Φ	logarithm (natural)	ln
second	S	(U.S.)	\$, ¢	logarithm (base 10)	log
		months (tables and		logarithm (specify base)	log <sub>2</sub> , etc.
Physics and chemistry		figures): first three	I D	minute (angular)	'
all atomic symbols		letters	Jan,,Dec	not significant	NS
alternating current	AC	registered trademark	® TM	null hypothesis	$H_{O}$
ampere	A	trademark	IM	percent	%
calorie	cal	United States	II C	probability	P
direct current	DC	(adjective)	U.S.	probability of a type I error	
hertz	Hz	United States of	TICA	(rejection of the null	
horsepower	hp	America (noun)	USA	hypothesis when true)	α
hydrogen ion activity	pН	U.S.C.	United States Code	probability of a type II error	
(negative log of)		U.S. state	use two-letter	(acceptance of the null	0
parts per million	ppm	C.D. Blace	abbreviations	hypothesis when false)	β
parts per thousand	ppt,		(e.g., AK, WA)	second (angular)	"
1.	‰ •			standard deviation	SD
volts	V			standard error	SE
watts	W			variance	**
				population	Var
				sample	var

#### FISHERY MANAGEMENT REPORT NO. 05-40

# MANAGEMENT PLAN FOR THE SUMMER COMMERCIAL TROLL FISHERY IN SOUTHEAST ALASKA, 2005

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#### **ABSTRACT**

This document summarizes the plan that the Alaska Department of Fish and Game (department) will follow to manage the 2005 Southeast Alaska summer commercial salmon troll fishery, according to the Board of Fisheries adopted guidelines listed in the State of Alaska Administrative Code under 5 AAC 29.090.

Key words: salmon, troll, summer, commercial, management plan

#### INTRODUCTION

The Southeast Alaska/Yakutat commercial salmon troll fishery occurs in State of Alaska and Federal Exclusive Economic Zone (EEZ) waters east of Cape Suckling and north of Dixon Entrance. The fishery is managed according to regulations promulgated by the Alaska Board of Fisheries (board), the North Pacific Fishery Management Council (NPFMC), the National Marine Fisheries Service (NMFS), and the U.S./Canada Pacific Salmon Commission (PSC). The department, under emergency order authority, conducts inseason management. In 2005, the allgear king salmon fishery will be managed to achieve a harvest target based on the "U.S./Canada 1999 bilateral agreement for the Southeast Alaska all-gear king catch" (Agreement). The Agreement specifies a harvest based on a relationship between a preseason Abundance Index (AI) generated by the Pacific Salmon Commission's Chinook Technical Committee and a target harvest rate specified in the Agreement. The Agreement also provides for an inseason adjustment to the harvest level based on an assessment of inseason data. Coho salmon will be managed to ensure escapement goals and to achieve board allocation guidelines. Coho salmon near Dixon Entrance will be managed in cooperation with Canada according to the Agreement.

This management plan discusses the management objectives and methods used to achieve board, NPFMC, NMFS, and PSC policies and goals for the commercial summer troll fishery. This plan covers commercial trolling for king, coho, and chum salmon. Other species caught and retained by trollers are considered incidental.

#### 2005 SUMMER TROLL FISHERY DATES

<u>July 1 through September 20.</u> King salmon may be harvested only during open periods announced by the department. The coho salmon season may be extended no more than 10 days (September 21 through September 30) in Districts 101 through 116 (Figure 1) depending on run strength (5 AAC 29.110).

#### MANAGEMENT APPROACH

#### KING SALMON

The majority of the king salmon harvested in the Alaska summer troll fishery are of wild stock origin. The hatchery stocks originate in British Columbia, Canada, Washington, and Oregon. As a result, the Southeast Alaska king salmon harvest is managed on an annual, all-gear catch quota established by the United States and Canada through the PSC. The ceiling is now abundance-based, with increased quotas when abundance is high, and vice versa. In addition to the catch ceiling of treaty fish, provisions of the Pacific Salmon Treaty (PST) administered by the PSC provide for an additional harvest of king salmon that have been produced in Alaskan hatcheries (add-on). The all-gear add-on is equal to the total number of hatchery king caught, minus the pre-treaty production of king salmon (5,000), and a risk adjustment factor.

#### **Management Objectives**

- 1. Achieve the allowable king salmon harvest.
- 2. Maximize the harvest of Alaska hatchery-produced king salmon.
- 3. Manage the fishery according to the board's Summer Salmon Troll Fishery and Coho Salmon Troll Fishery Management Plans (5 AAC 29.100 and 5 AAC 29.110).
- 4. Continue the coastwide natural king salmon stock-rebuilding program.
- 5. Achieve catch allocations among user groups as mandated by the board.
- 6. Minimize the incidental mortality of king salmon to the extent practicable.

#### **Management Methods**

#### **General Summer Fishery**

Historically, the majority of king salmon are taken during the general summer opening when the majority of waters, including the outside waters, are open to trolling. Unlike the spring fishery, a quota is set for management of king salmon. One of the major functions of the department's troll management plan is determining when the general summer season for king salmon must be closed in order to stay within the allowable harvest. Tabulating the up-to-date troll catch is difficult due to the large number of fish tickets and the difficulty of receiving them from remote areas in a timely manner. Therefore, a Fisheries Performance Data (FPD) program, consisting of confidential interviews with commercial trollers as they deliver catches, is used to estimate daily catch rates in six areas (Figure 2). The total number of days the fishery will be open for king salmon retention is calculated by dividing the summer season harvest goal by the estimated daily catch by the troll fleet. From 1992 through 1995, and again in 2000 and 2001, the department announced a fixed number of days beginning July 1, due to the low number of king salmon available for harvest. From 1996–1999 and 2002–2004, the department returned to in-season management. For 2005, the department will manage the first opening period in season. In-season management for 2005 is preferable because the very large king quota makes it more difficult to project the number of days it will take to harvest the quota. The department will manage the summer troll season according to the board management plan (5 AAC 29.100), which calls for harvesting 70% of the remaining king salmon troll quota (see next section) in an initial opening beginning July 1. The remainder of the king salmon quota is to be harvested following any closure for coho salmon conservation and/or allocation in August. The management plan also calls for all areas to be open during the July 1 opening. Following the first king opening, the areas of high king abundance (Figure 3) will be closed unless fewer than 30% of the total remaining number of king salmon were harvested in the first opening. In addition, during the second king salmon opening, if the department determines after 10 days that the annual troll king salmon harvest ceiling might not be reached by September 20, the commissioner shall reopen by emergency order the areas of high king salmon abundance.

The hatchery add-on is calculated in season through port sampling programs. King salmon are sampled for the presence of adipose fins. The heads from fish missing adipose fins are then sent to the Juneau mark, tag and age lab for processing. Coded wire tags are removed from the heads and decoded. The number of Alaskan hatchery fish is calculated by expanding the number of Alaskan hatchery-produced king salmon in the sampled catch by the total catch.

#### **Projected 2005 King Salmon Harvests**

The king salmon fisheries will be managed according to the Agreement. In addition to the pretreaty "base catch," of 3,700 king salmon, and the hatchery catches in the winter and spring fisheries, Alaska hatcheries are projected to contribute approximately 6,700 king salmon to the summer troll harvest for a projected 2005 total catch of 28,000 Alaska hatchery king salmon. The actual hatchery add-on will be determined in season and finalized postseason from codedwire-tag (CWT) estimates.

At the February 1997 Board of Fisheries meeting, sharing percentages were established for the recreational and commercial troll and net king salmon fisheries (not including Alaska hatchery king). The commercial troll fishery was allocated 80% and the recreational fishery 20% of the PST quota, after subtracting 4.3% from the total for the purse seine fisheries, 7,600 for the drift gillnet fishery, and 1,000 for the setnet fishery. Each group is responsible for proportionally sharing the 5,000 pre-treaty king salmon harvest and risk adjustment factors.

The Chinook Technical Committee (CTC) of the PSC has determined that the king salmon abundance index for Southeast Alaska for 2005 is 2.05. This abundance index equates to an allgear quota for treaty king salmon of 416,400 fish. This quota is 32,865 fish higher than the 2004 pre-season quota and is the highest allowable catch since the PST has been in effect (1985). The large king salmon quota is due to significant increases in abundance projections over the past several years for nearly all stock groups that are harvested in the Southeast Alaska all-gear king salmon fishery. According to the BOF allocation plan outlined above, the troll fishery allocation of the treaty quota is approximately 311,916 fish. The summer troll quota is calculated by adding the winter treaty harvest (44,900 fish), the spring treaty harvest (estimated 43,000 fish), the pretreaty Alaska hatchery harvest (3,700 fish), and a statistical risk factor surrounding the Alaska hatchery contribution estimate of 1,000 fish, and subtracting the catch of Transboundary River fish above the base period catch (estimated at 3,500 fish). The resultant sum is then subtracted from the troll allocation. This results in a summer troll quota of approximately 222,800 fish. In addition, under the BOF plan, 70% of the summer quota is to be harvested during the first summer opening beginning July 1. Therefore, the target catch for the first opening will be approximately 156,000 treaty fish, plus an estimated 3% Alaska hatchery fish, or a total first summer opening target catch of 160,800 fish. The second king opening treaty target catch is projected to be approximately 68,900 (66,800 Treaty) fish. However, the actual target for the second opening will be dependent upon the catch in the first king opening and any changes in the spring fishery catch.

#### Preliminary Treaty King SalmonTroll Fishery Harvests for the 2005 Season

	KIN	G SALMON	CATCHES		
Treaty Quota	Seine	Drift GN	Set GN	Sport	Troll
416,400	17,905	7,600	1,000	78,000	311,900
			Total	Hatchery	Treaty Fish*
2005 Troll Numbers:	V	Vinter	50,417	5,474	44,900
	S	pring	58,000	15,000	43,000
Pre-Summer Total Catch:					87,900
Pre-treaty hatchery and statistical	risk factor:				4,700
		T	otal pre-Summer C	atch:	92,600
Transboundary Rivers directed ca	tch		1		-3,500
·					89,100
Summer Total = Troll - Pre-summer total - Pre-treaty and risk factor - TBR: $311,900 - 89,100$				222,800	
Projected First Summer Treaty Fi	_				156,000
Projected Second Summer Treaty Fish Target = Summer total-First summer catch =			66,800		

<sup>\*</sup>Numbers are rounded.

The department will update the preseason projection of abundance with actual fishery catch and effort statistics immediately following the closure of the first opening. Any adjustments to the targeted all-gear harvest based on this inseason data will be made as soon as possible.

Based on past fishery performance at similar abundance levels of treaty king salmon, the department anticipates the first opening will last between 11 and 15 days. However, effort and catch rates are highly variable and because the projected fishery length is based on historical effort levels the actual length of the first opening could be significantly different than projected. Closure announcements and any updates will be made via U.S. Coast Guard marine advisory broadcasts and trollers are advised to either listen to the U.S. Coast Guard Marine Advisory broadcasts daily or stay in close contact with the department or processors for any such announcements.

Following the closure of the initial summer king salmon period, all king salmon must be offloaded prior to resuming trolling for other species.

#### COHO SALMON

Most coho salmon harvested in the troll fishery are of Alaska origin. They spawn in approximately 2,500 streams in Southeast Alaska during the fall and early winter months. Coho salmon catches were depressed in the mid to late 1970s but improved through most of the 1980s and 1990s. The 2003 catch was 1.22 million fish, with no mid-season closures. The 2004 catch was 1.91 million fish, the fifth largest since statehood. There was a 2-day closure in mid-August (a mandatory closure prior to the second king salmon retention period) and the season was extended through September 30.

Troll fishery catches of coho salmon in outer coastal areas generally peak during mid-July to mid-August. Catches in inside fisheries generally peak during late August to mid-September. Most coho salmon migrate into spawning streams between late September and mid-October.

Early in the season, coho salmon stocks returning to southern Southeast Alaska are harvested by the troll fishery in northern and central outside areas where they intermingle with coho salmon bound for northern and central areas of the region. Management of coho salmon is based on aggregate abundance. Lack of a general coho salmon stock identification technique prevents assessment of run strength of individual stock groups contributing to these early-season mixed stock fisheries. Hatchery coho salmon production (almost entirely from Southeast Alaska facilities) first became significant in 1980. The contribution of hatchery coho salmon since then has varied from 0.4% of the total troll catch in 1980, 13.0% in 1986, 5.5% in 1988, and 20 to 26% from 1996 through 2003. The 2004 Alaska hatchery contribution of 16% was slightly lower than the past eight years with the actual catch at fourth lowest during that same time period.

#### **Management Objectives**

- 1. Provide adequate escapement of coho salmon, by area, to ensure sustainable populations.
- 2. Provide maximum opportunities for harvest consistent with conservation objectives.
- 3. Manage the coho salmon fisheries to achieve allocations consistent with board regulations.
- 4. Manage coho salmon on the U.S./Canada border to comply with provisions of the Agreement.

#### **Management Methods**

As with king salmon, the department's primary tool for inseason assessment of coho salmon catch rates is a program of dockside interviews with vessel skippers. Catches by the net fisheries are obtained from fish tickets, while the recreational catch is estimated from a creel census conducted by the Sport Fish Division. An assessment of run strength using troll catch per unit of effort (CPUE) data from the FPD program occurs in mid to late-July. Information available on individual coho salmon indicator stocks will also be considered in management actions.

Catch rates will be assessed in Southern Southeast Alaska from mid-through late-July to assess run strength of early-run coho salmon returning to systems in both Canada and the U.S., near the border. If run strength is weak, areas of Districts 101–104 may close for conservation for up to three weeks, from late July through mid-August, as per the terms of the June 1999 PST agreement.

Projected total season troll coho salmon harvests will be used as a relative index of total run size. Analysis of the FPD program has shown that the average area-wide catch-per-day for Statistical Weeks 28 and 29 (average week ending date is July 19) for the years 1996 to 2000, 2003 and 2004 is a good predictor of the a wild coho salmon catch (Figure 4). If the projected overall run size is less than 1.1 million wild fish, the department will implement a 7-day conservation closure beginning sometime in late July (5 AAC 29.110). In 2005, the department will make this projection during the third or fourth week of July (Figure 4). The 2001 and 2002 catch and effort data were not used for this projection because coho fishing patterns during those years did not reflect normal catches and effort. The department will continue to monitor all coho fisheries after this period to determine if the number of coho salmon reaching inside areas will be adequate to provide for spawning requirements, given normal or even restricted inside fisheries. The primary

abundance indicators for this assessment consist of relative harvest levels by all fisheries and, in particular, CPUE of wild fish in inside drift gillnet and sport fisheries compared to 1971–1980 levels. An assessment will be made in early August to determine when and how long to close the troll fishery for conservation and allocation purposes.

Cumulative catch per day of wild fish will be monitored in each of the six FPD areas (Figure 2) through August to assess run strength in each of the areas. Data will be compared with catches and CPUE within these areas and, if necessary, the department will implement area-specific closures.

The department, in years of high abundance, may extend the troll season through September 30 in portions of Districts 101 through 116 if there are no conservation concerns. The department will consider the following data in determining if an extension is warranted:

- 1. Total run size projection,
- 2. Total harvests to date by gear by area,
- 3. CPUE relative to previous years by gear by area,
- 4. Percent of hatchery fish in the catch relative to previous years,
- 5. Survival projections for hatchery and wild stocks, and
- 6. Inseason escapement data.

The department will announce any extensions, if warranted, during the week of September 14.

#### **Allocation Actions**

The board has established long-term allocation goals for the coho salmon harvest by each commercial gear type. Target percentages established by the board are 61% for troll, 19% for purse seine, 13% for drift gillnet, and 7% for set gillnet. The board stated that subsistence, personal use, and recreational harvests of coho salmon are not affected by the established allocations between commercial gear types. The board also stated that:

"These percentages are guidelines only and may vary from season to season given natural fluctuations in salmon abundance and distribution and the limitations of fisheries management. It is, however, the board's intent that these allocation guidelines be met as closely as possible over the long term. It is not the board's intent for the department to disrupt any of the traditional commercial fisheries that the historical allocation is founded. The department may, however, make inseason adjustments to attempt to achieve these long term allocation guidelines."

The department will, however, implement applicable, existing regulations (5 AAC 29.100). These regulations are:

1. A regionwide troll closure for up to 10 days is required during the coho salmon season to address allocations between outer coastal fisheries and inside water fisheries if the department determines that the proportional share of coho salmon harvest by the troll fishery is larger than that of inside gillnet and recreational fisheries compared to the 1971–1980 levels. Primary inside fishery indicators for this assessment are overall coho salmon harvests, escapement projections for streams where escapement goals have been

established and CPUE in the Tree Point, Prince of Wales, Taku/Snettisham, and Lynn Canal drift gillnet fisheries, and Juneau marine sport fishery.

- 2. In Sections 1-C, 1-E, and 1-F, salmon may be taken only as follows:
  - (a) Section 1-C: from August 15 through September 20.
  - (b) Section 1-E:
    - (1) In waters of W. Behm Canal within one nautical mile of the western shore of Revillagigedo Island north of the latitude of Escape Point 55°39.07'N. lat., 131°43.08' W. long. excluding the waters of the Neets Bay SHA (5 AAC 33.370) from July 1 through September 20.
    - (2) All other waters from July 13 through September 20.
  - (c) Section 1-F: east of a line from the northernmost tip of Kirk Point to Mary Island Light to the southernmost tip of Cone Island, from July 13 through September 20.
  - (d) Section 1-F: east of a line from the southernmost tip of Black Island to the westernmost tip of Slate Island to the westernmost tip of White Reef to the easternmost tip of Black Rock to the northernmost tip of Kirk Point, including the waters of Boca de Quadra not closed under 5 AAC 29.150(b)(2), from August 1 through September 20.
- 3. In District 8 the weekly fishing periods for trolling are the same as for drift gillnetting.
- 4. In District 11 salmon may be taken only in Sections 11-C and 11-D.
- 5. In District 15 salmon may be taken only in Sections 15-A and 15-C.
- 6. The troll fishing schedule in portions of State waters off Yakutat, beginning August 7, corresponds to weekly fishing periods in the set gillnet fisheries (Figure 6).

If a region-wide troll closure is implemented to conserve coho salmon during late July or early August, the likelihood of a closure during mid-August to meet the allocation criteria will be reduced. Any potential transfer of coho salmon harvest to inside fisheries resulting from an early closure, if implemented, will be reflected in inside fishery performance indicators used for comparison against the allocation criteria.

#### **Tentative 2005 Summer Season Schedule**

The following is a generalized timetable for summer salmon management. It is emphasized that some modifications to this schedule may be required.

DATES	EXPECTED REGULATORY ACTIONS
July 1	Open the 2005 general summer troll season for all species; the initial troll king salmon opening will close when 70% of the total summer harvest target has been harvested. The first king salmon retention period will be managed in season with no pre-determined length. The waters of frequent high king salmon abundance will close following the king salmon closure.
Mid through late July	Assess coho salmon run strength in Southern Southeast Alaska. Portions of Districts 101–104 may close if run strength indicates conservation concerns for coho salmon stocks near the U.S./Canada border.
Late July/early August	Seven-day, region-wide conservation closure if projected run size is less than 1.1 million wild coho salmon; the projected total season commercial harvest will be used as index of run size.
Mid to late August	A region-wide closure of up to 10 days will be implemented if required for either coho salmon conservation or allocation based on assessment of stock and fishery performance data relative to board-established criteria. If a regionwide conservation closure has occurred during late July, the likelihood of a closure being implemented for allocation at this time will be reduced.
	Following any closure of the troll fishery, the king salmon fishery will reopen to take all of the remaining treaty quota king salmon. A minimum closure of 2-days is required prior to the second king salmon opening to allow for a fair start (5 AAC 29.100(c)(1)(B)(ii)).
	During the closure period, a chum salmon fishery may occur in the Sitka Sound and Neets Bay areas.
Late August to September 20	Coho salmon conservation measures implemented region-wide or by area, as required, to protect weak coho stocks.
Mid-September	An assessment of coho strength to determine if the troll season may remain open no longer than September 30.
September 20	Established regulatory closing date of 2005 general summer troll season.

The widespread and complex nature of the troll fishery necessitates a closely coordinated management program. Inseason management is accomplished through a team consisting of the Southeast regional supervisor and management biologist, two troll fishery management biologists, and 11 area management biologists. Department contact information is listed at the end of this plan.

## OPEN AREAS DURING 2005 GENERAL SUMMER TROLL SEASON

Salmon trolling is permitted in all areas during the first king salmon retention period of the 2005 general summer season except for those waters described above (5 AAC 29.100) and the closed waters listed in 5 AAC 29.150. In addition, during subsequent king salmon retention periods, waters designated as frequent high king salmon abundance (5 AAC 29.025) will be closed as necessary.

#### REGULATIONS PERTAINING TO COMMERCIAL TROLL BYCATCH OF GROUNDFISH AND HALIBUT

For a complete guide to the Southeast Alaska Groundfish regulations, refer to the 2003–2005 Groundfish Fishery Commercial Fishery Regulations books available at all Southeast ADF&G area offices.

- (1) Commercial halibut may be legally retained only by trollers holding individual fishing quota shares (IFQs) during the open season for halibut, February 27-November 15 (50 Code of Federal Regulations (CFR) 679.4 (d)) and 5 AAC 28.133 (c). Trollers holding unfilled IFQs are required to retain any halibut taken incidentally while trolling (50 CFR 679.7 (f)(11)). If trollers have no more than 500 pounds of halibut onboard and if landed concurrently with a legal landing of salmon, they can offload their catch without having to give a 6-hour notice to the National Marine Fisheries Service (50 CFR 679.5 (l)(1)(iv)). Trollers fishing for salmon in Sitka Sound may retain halibut bycatch if they hold IFQs (50 CFR 300.63). Halibut taken incidentally while trolling for salmon should be reported on the same troll ticket with the salmon harvest.
- (2) Lingcod greater than 27" (tip of snout to tip of tail) may be taken as bycatch in the commercial salmon troll fishery from May 16 through November 30 (5 AAC 28.113 (c)) in areas in which the troll bycatch allowance has not been harvested. Troll bycatch limits have been established for the Northern Southeast Outside (NSEO), and the East Yakutat management areas. In these areas, trollers may retain lingcod(round weight) up to 5% of the round weight of salmon harvested. When the troll lingcod quota is reached for each management area, trollers will be required to release all lingcod back into the water. There are no troll bycatch limits in the other management areas, so trollers may retain unlimited amounts of lingcod over 27" in length until the troll allocation is reached in each area (5AAC 28.133(a)). Inseason closures may occur on short notice and will be announced by news release. Trollers are no longer required to deliver lingcod head-on or with the external gender indicators intact.
- (3) Trollers are requested to retain tagged lingcod of any size and to notify the nearest Fish and Game office at the time of delivery so the fish may be sampled (in Sitka, contact Mike Vaughn, 304 Lake Street, Room 103; phone: 907-747-6688). The date, exact location, and depth should be recorded. A reward will be given to those who turn in tagged lingcod with the necessary catch information. Tags must be left on tagged sublegal lingcod or any tagged lingcod caught out of season, and fish should be landed in the round. Trollers are reminded that the waters of Sitka Sound are closed permanently to the taking of lingcod (5 AAC 28.150 (a). Trollers who have lingcod onboard may not fish in areas closed to lingcod retention.

- (4) Full retention of Demersal Shelf Rockfish (DSR) is required in all state waters. All CFEC permit holders must retain, weigh, and report all DSR taken. All DSR in excess of 10% round weight, of all target species on board the vessel must be weighed and reported as bycatch overage on an ADF&G fish ticket. All proceeds from the sale of excess DSR bycatch shall be surrendered to the state (5 AAC 28.171 (a)). The seven species of rockfish in the DSR assemblage are yelloweye, quillback, canary, rosethorn, copper, china, and tiger rockfish. Retention of other rockfish species is allowed but is no longer required.
- (5) Trollers are allowed to longline for groundfish and troll for salmon on the same trip as long as salmon are not onboard the vessel in an area closed to trolling and the fisher has both a commercial salmon permit and a commercial longline permit. Longliners are reminded to submit a logbook with their fish ticket.

## RULES PERTAINING TO SWITCHING BETWEEN COMMERCIAL TROLL GEAR AND MECHANICAL JIG/DINGLEBAR GEAR

Trollers must stop fishing for groundfish/halibut with mechanical jig or dinglebar gear three days (72 hours) prior to a salmon troll opening if they plan on participating in that salmon troll fishery. Trollers must also wait 24 hours after a salmon troll closure before fishing for groundfish with mechanical jig or dinglebar gear (5 AAC 29.120 (h)). Once a salmon troll opening is in progress, these waiting periods are not necessary. Salmon must be offloaded prior to fishing with mechanical jig or dinglebar gear (5 AAC 28.133(b)). A vessel, fishing for groundfish with dinglebar gear must display the letter D. A vessel, fishing for groundfish with mechanical jig gear must display the letter M (5 AAC 28.135). A vessel, fishing for salmon cannot have the letter M or D displayed.

## SPORT FISHING FROM A COMMERCIALLY LICENCED TROLL VESSEL

- 1. Sport fishing is allowed from a registered commercial salmon troll vessel (5 AAC 47.041 (a)).
- 2. If sport fishing in waters closed to commercial trolling, the dorsal fin must be removed immediately from any salmon brought onboard the vessel (5 AAC 47.041(c)).
- 3. Sport fishing from a commercially licensed vessel, while commercially-caught salmon are in possession, is illegal in waters closed to commercial salmon fishing (5 AAC 47.041(d)).
- 4. A vessel registered for commercial trolling may also be registered as a charter vessel, though a vessel may not be used for both activities on the same day (5 AAC 75.995 (8)). Sport-caught fish may not be sold.
- 5. A troll gurdy may NOT be used in conjunction with a fishing rod while fishing commercially but may be legally used as a downrigger to sport fish from a hand or power troll vessel (5 AAC 29.120 (e)).

These regulations can be found in the 2005 Sport Fishing regulation booklet.

#### REGIONAL AQUACULTURE TERMINAL HARVEST AREAS

Terminal harvest areas (THAs) are described in the Southeast Alaska and Yakutat Areas Commercial Salmon and Miscellaneous Finfish Regulations book. Hidden Falls, Inner Silver Bay, Neets Bay, Earl West Cove, Anita Bay, Deep Inlet, and Nakat Inlet THAs will be open to the harvest of all salmon species as announced and will be closed by emergency order. Trollers are requested to consult the appropriate terminal harvest area News Releases or contact any department office for the exact harvest schedules for each THA.

#### SITKA SOUND AND NEETS BAY CHUM SALMON PLANS FOR 2005

#### Sitka Sound

NSRAA is expecting about 2,300,000 chum salmon to return to the Deep Inlet Terminal Harvest Area (THA) (Figure 9) and the Medvejie Hatchery, with approximately 1,765,000 chum salmon to be available for common property harvest. This projected return is greater than the 2004 projection by 442,000 fish, though similar to the actual 2004 return of 2,150,000 fish. The Deep Inlet THA rotational schedule began on May 1 to allow net fisheries to intercept Medvejie hatchery Chinook. The THA is open to trolling one day per week (Wednesday or Thursday) between May 5 and June 30.

The department issued a news release on June 16 describing Deep Inlet THA openings July 3 thourght August 20 to target chum salmon. Beginning July 4, trolling will be allowed weekly troll openings in the THA each Monday, Tuesday, Friday, and Saturday through August 20 unless changed by a subsequent announcement. Trolling will be allowed during these scheduled times as long as it does not interfere with cost recovery fishing. Once cost recovery goals are met, the troll opening schedule will revert to one day per week, on alternating Wednesdays and Thursdays, until the end of the season.

Cost recovery fishing in waters of Silver Bay and Eastern Channel is expected to begin in late June to early July. From July 22 until one day prior to the end of the troll coho salmon closure, the cost recovery area will be reduced in size.

The Alaska Board of Fisheries during its February 2003 meeting expanded the area in Sitka Sound where the department may open by emergency order a fishery in which trollers may target chum salmon during the troll coho closure in August (5 AAC 29.112). This area includes waters of Sitka Sound and the Eastern Channel east of a line from Vitskari Rock light to Inner Pt., south of a line from Inner Pt., to Black Rock at 57°03.12' N. lat., 135°25.63' W. long. to Signal Island light at 57°02.78' N. lat., 135°23.58' W. long, and north of a line from Cape Burunof at 56° 59.03' N. lat., 135°23.23' W. long., to Kulichkof Rock at 56°59.52' N. lat., 135°26.62' W. long. to Vitskari Rock light (Figure 10). During this fishery, trollers may not retain or have onboard any coho or king salmon.

#### **Neets Bay**

The Neets Bay Special Harvest Area has been open to trollers since April 15 and will be open until further notice (Figure 7). SSRAA will allow trollers to harvest summer chum in the SHA, with the target goal of 200,000 fish. SSRAA anticipates allowing troller access in the SHA throughout the summer chum return that peaks July 25 through approximately August 10. SSRAA will consider closing the SHA in inner Neets Bay under the following circumstances:

- On July 20, the return appears to be 15% less than forecast;
- Difficulty in capturing the required broodstock for the hatchery; and
- A harvest rate that suggests troller harvest would exceed 200,000 fish.

The Alaska Board of Fisheries, during its February 2003 meeting also established an area in Neets Bay in which trollers may target chum salmon during the troll coho closure in August (5 AAC 29.112). The department may open, by emergency order, the waters of Neets Bay from the longitude of Chin Point to the longitude of the easternmost tip of Bug Island. SSRAA is expecting a summer chum salmon return to the Neets Bay terminal area of approximately 1,010,000 fish.

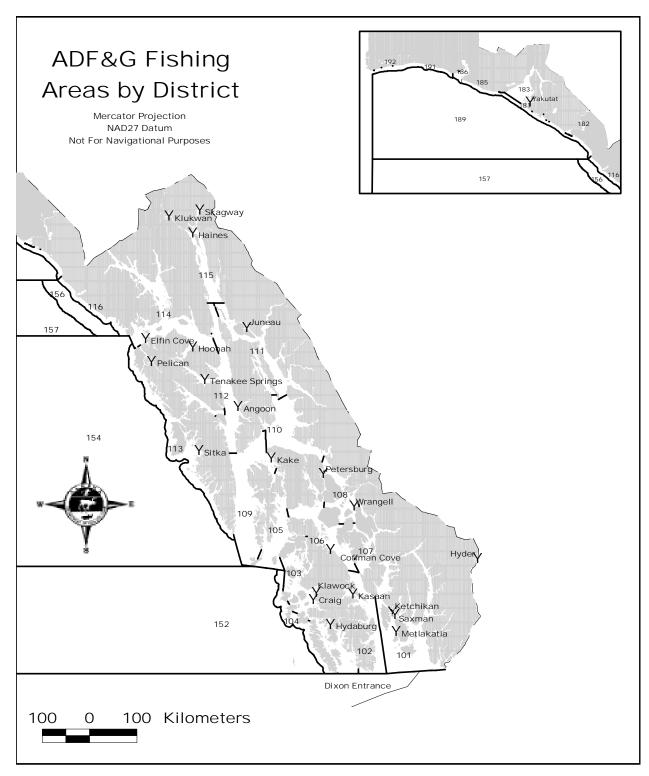


Figure 1.—General summer catch reporting districts.

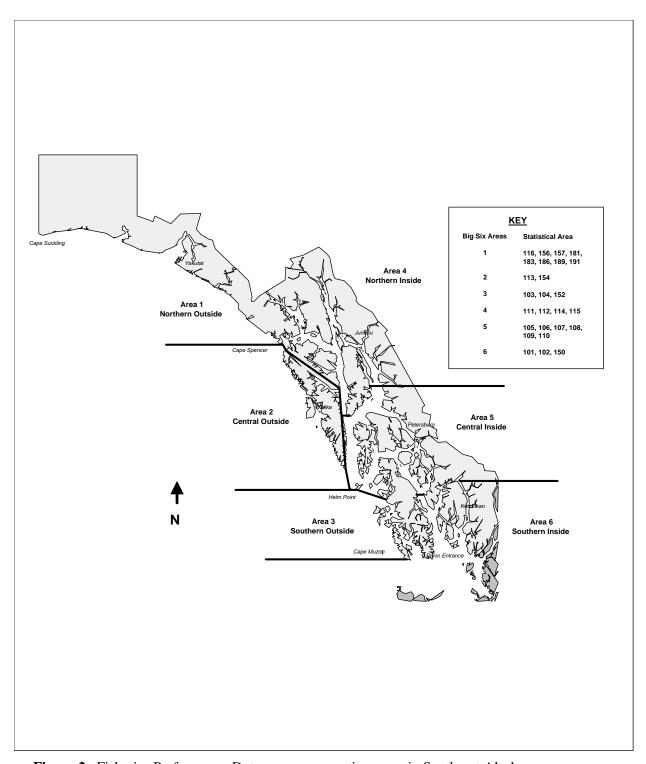
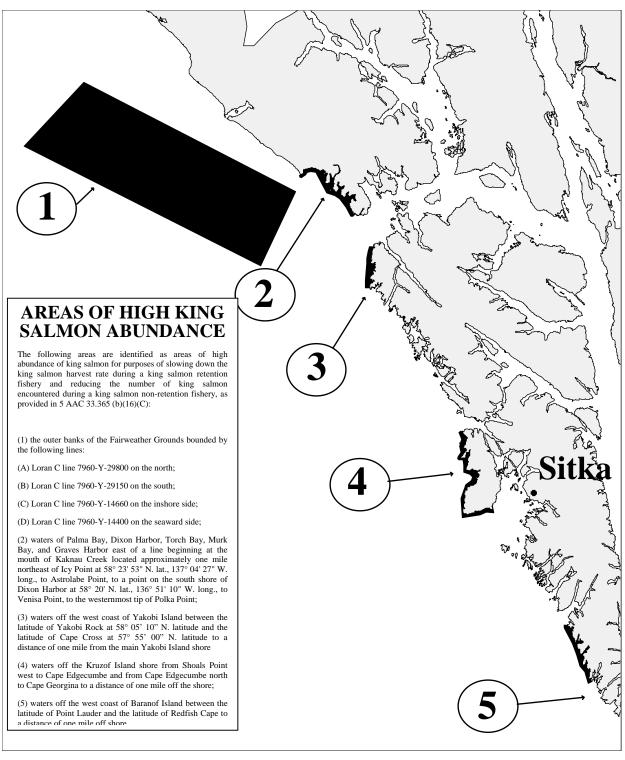
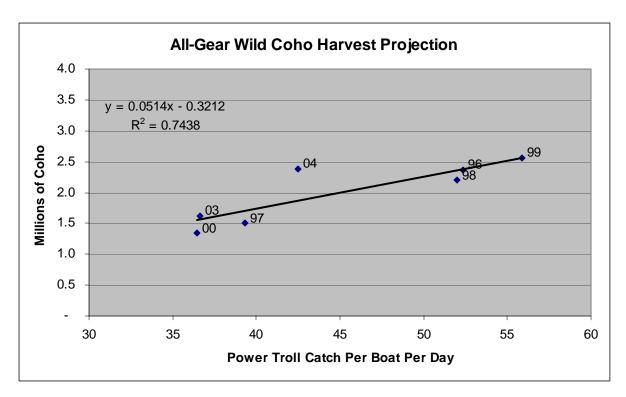


Figure 2.–Fisheries Performance Data program reporting areas in Southeast Alaska.



**Figure 3.**—Southeast Alaska areas closed to trolling for all species following the initial king salmon opening in the Southeast Alaska summer troll season.



**Figure 4.**—The linear regression model that is used inseason to predict the wild Southeast Alaska commercial coho salmon catch.

*Note:* Y axis = Region total commercial wild coho salmon catch prediction (excluding hatchery cost recovery).

X axis = Troll fishery average power troll wild coho catch per boat day for Statistical Weeks 28-29 (July 7-20), which is calculated by adding the average daily catch rate for boats that make a landing in week 28 (July 7-13) and the average daily catch rate for boats that make a landing in week 29 (July 14-20).

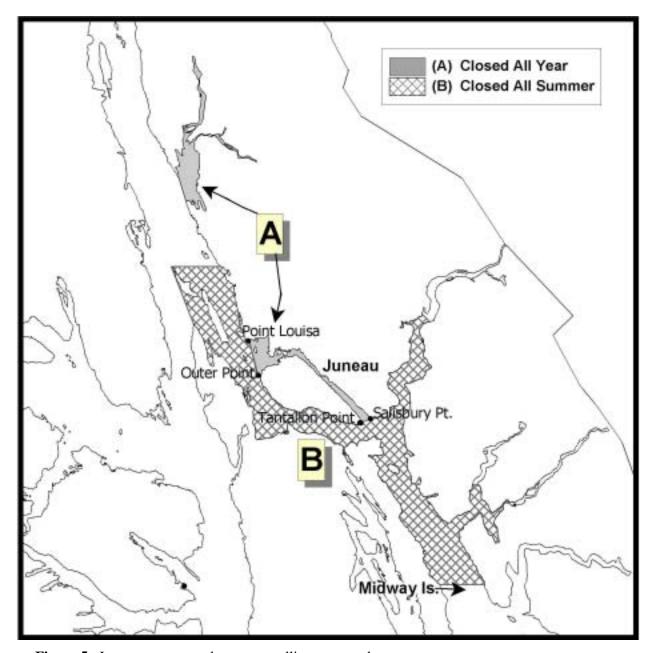
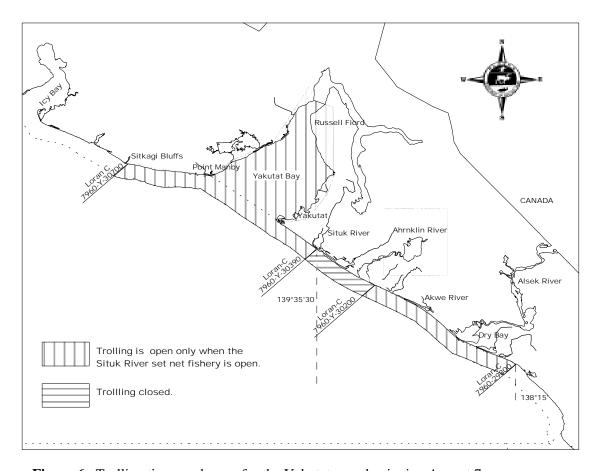


Figure 5.—Juneau area general summer trolling areas and seasons.



**Figure 6.**—Trolling times and areas for the Yakutat area, beginning August 7.

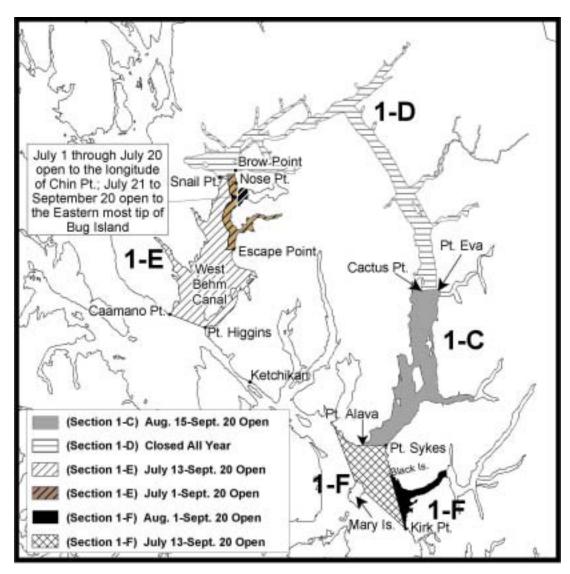


Figure 7.–Ketchikan area general summer trolling areas and seasons.

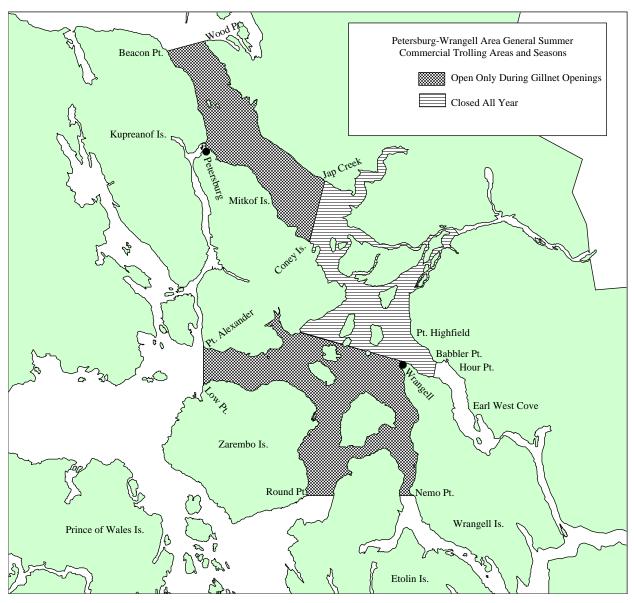
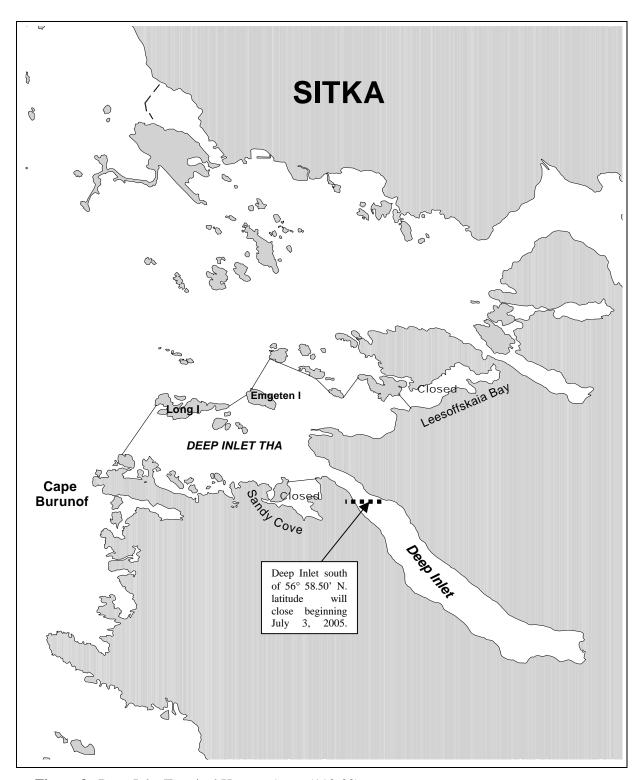
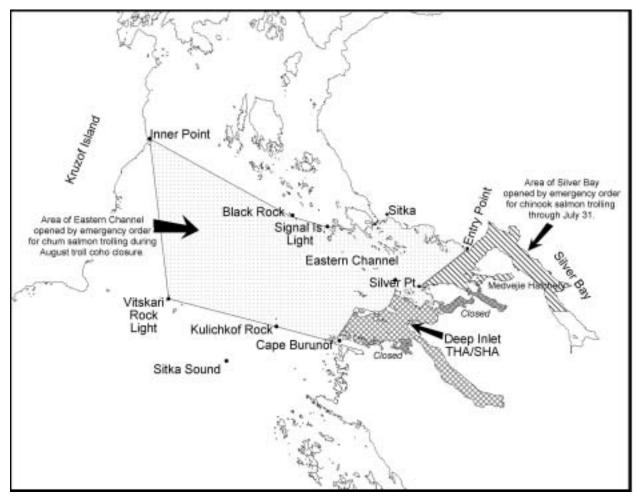


Figure 8.-Petersburg/Wrangell area general summer trolling areas and seasons.



**Figure 9.**–Deep Inlet Terminal Harvest Areas (113-38).

This map is for general information only and does not exempt trollers from provisions in 5 AAC 29.150 (CLOSED WATERS) or Emergency Orders issued by the Department of Fish and Game.



**Figure 10.**—Silver Bay and Eastern Channel Special Harvest Areas and terminal troll areas for chum salmon in Sitka Sound (113-35).

The area shown is the area described in 5 AAC 29.112(b). The actual area that will be open by Emergency Order may be different. The eastern portion of Eastern Channel has normally been closed during the chum fishery in past years.

This map is for general information only and does not exempt trollers from provisions in 5 AAC 29.150 (CLOSED WATERS) or Emergency Orders issued by the Department of Fish and Game. See management plan text for description of area.

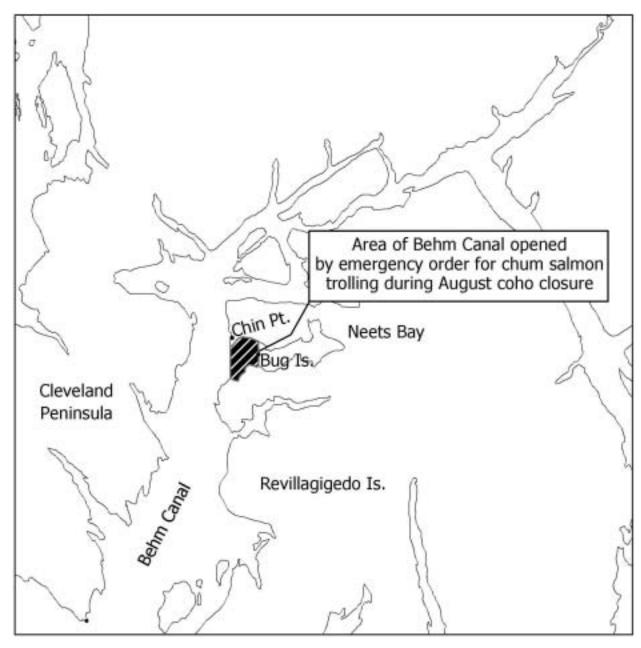


Figure 11.-Neets Bay Terminal Harvest Area for chum salmon fisheries.

#### FISHERY CONTACTS

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For up-to-date troll information, call the 24-hour information line in the Douglas Office at 465-TROL (8765). In addition, the following telephone numbers may be called during the troll fishing season to obtain recorded announcements concerning areas open to trolling.

Ketchikan-(907) 225-6870

Sitka-(907) 747-8765

Petersburg-(907) 772-3700

#### SOUTHEAST ALASKA TROLL WEBSITE

http://www.cf.adfg.state.ak.us/region1/finfish/salmon/troll/trolinfo.php